

**Amendments to the Claims:**

**This listing of claims will replace all prior versions, and listings, of claims in the application:**

Claim 1. (original) An array comprising a plurality of nucleic acid probes, wherein each probe in the plurality of nucleic acid probes consists essentially of one of the sequences listed in SEQ ID Nos. 1-124,031 and wherein the plurality of nucleic acid probes of the array comprises each of the sequences listed in SEQ ID NOS. 1-124,031.

Claim 2. (original) The array of claim 1 further comprising a second plurality of nucleic acid probes, wherein each probe in the second plurality of nucleic acid probes consists essentially of the complement of one of the sequences listed in SEQ ID NOS: 1-124,031 and wherein the second plurality of nucleic acid probes comprises the complement of each of the sequences listed in SEQ ID NOS: 1-124,031.

Claim 3. (original) The array of claim 2 further comprising a third plurality of nucleic acid probes, wherein each probe in the third plurality of nucleic acid probes consists essentially of the sequence of one of the sequences listed in SEQ ID NOS: 1-124,031 except with a mismatch at the central position.

Claim 4. (original) The array of claim 1 wherein each probe is attached to a bead.

Claims 5-7 (canceled)